

ABSTRACT

An apparatus and method for controlling temperature in a boil-off gas in a liquefaction plant prior to compression, wherein boil-off gas originating from an LNG storage tank is compressed and at least partially condensed, and wherein the condensed boil-off gas (LNG) is being returned to the storage tank. A heat exchanger (20) is connected to the boil-off gas feed line upstream of the compressor (10), and a first conduit (22) fluidly connects the line for returning LNG to the storage tank and the heat exchanger (20). A second conduit (26) fluidly connects the heat exchanger (20) to the boil-off gas feed line at a point upstream of the heat exchanger (20). Boil-off gas is heat exchanged against the cooler (24) prior to being fed into the compressor (10). Thus, the boil-off gas temperature is lowered downstream of the heat exchange.